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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,305	04/09/2001	Louis A. Rigali	NOR-953B	8088
37172	7590	01/07/2004	EXAMINER	
WOOD, HERRON & EVANS, LLP (NORDSON) 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			MOORE, KARLA A	
			ART UNIT	PAPER NUMBER
			1763	

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,305

Applicant(s)

RIGALI ET AL.

Examiner

Karla Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-45, 49 and 50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-45, 49 and 50 is/are allowed.
- 6) ☒ Claim(s) 28 and 36 is/are rejected.
- 7) ☒ Claim(s) 29-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0701, 0502 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119 and/or 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

2. The present application claims priority to prior U.S. Patent applications 09/829,305 and 09/012,743 (now Patent No. 6,245,189). These claims are considered to be valid, as the subject matter disclosed in the parent applications is commensurate with that of the present application. The present application also claims priority to U.S. Patent applications 08/601,687 (now Patent No. 5,766,404) and 08/350,320. The subject matter of the '687 application and the '320 application is not commensurate with the present application. Therefore, the benefit of these filing dates has not been considered in the rejections of the present office action.

Specification

3. The abstract of the disclosure is objected to because it is too long. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 28 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,773,088 to Bhat in view of U.S. Patent No. 5,505,777 to Ciardella et al.

6. Bhat discloses a system for the plasma treatment of a plurality of parts at one time substantially as claimed and comprising: a reaction chamber having an open bottom (Figure 3, 66); a chamber base (Figure 3, 68) sealing engageable (sealed via gate valve assembly, 84) with said bottom of said reaction chamber to form a treatment chamber (64); a lifting device (not illustrated, column 10, rows 5-7 and 20-25) coupled with said reaction chamber and operable to lift said reaction chamber from said chamber base; a guide (Figure 5, 168; column 8, rows 35-38) along which each of the plurality of parts may be moved; a transfer mechanism (Figure 5, 180) operable to transfer the plurality of parts along said guide to a plurality of treatment positions within said treatment container when said reaction chamber is disengaged from said base; a plasma generating device (column 5, rows 46-54). Bhat discloses that a plurality of substrates may be disposed in a reaction chamber (Figure 4; column 6, rows 38-42). Bhat also discloses that a plurality of reaction chambers can be used in an apparatus like the one disposed in Figures 6, 9-10 and 12-15, so that even more substrates can be processed by the system (column 12, rows 41-46).

7. However, Bhat fails to teach the system comprising an electronic control system that controls said transfer mechanism for transferring the plurality of parts to said plurality of treatment positions.

8. Ciardella et al. teaches the use of an electronic control system for the purpose of providing overall control to a circuit board manufacturing system, including a transport mechanism, (column 3, rows 3-21 and column 5, rows 43-55).

9. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided an electronic control system in Bhat in order to provide overall control to a circuit board manufacturing system as taught by Ciardella et al.

10. With respect to claim 36, said electronic control system comprises a microprocessor interfaced with said transfer mechanism by SMEMA communication.

Allowable Subject Matter

11. Claims 29-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or fairly suggest the following limitations in the system described above. Additionally, no other piece of prior art provides motivation for combining the following limitations with the prior art described above. The limitations are: a) the transfer mechanism comprises: a vertically-positionable transfer arm capable of selective engagement with each of the plurality of parts; and a linear drive assembly for moving said transfer arm along the length of the treatment chamber (claim 29); b) the system further comprising: a first position actuator and a second position actuator position on opposed ends of said treatment chamber, said first and second actuators capable of horizontal movement, an input carrier mounted on said first position actuator, said input carrier including a conveyor capable of conveying each part to a location adjacent the guide; and an output carrier mounted on said second position actuator, said output carrier comprising a conveyor capable of conveying each part to a location removed from said guide (claim 30); c) said electronic control system further comprises a plurality of sensors that provide information regarding the position of said transfer mechanism (claim 31); e) said guide located within said treatment chamber when said reaction chamber is fitted to said chamber base (claim 32).

13. Claims 33-35 each contain at least one of the limitations above.

14. Claims 37-45 and 49-50 are allowed.

15. The following is an examiner's statement of reasons for allowance for claims 37-45: The prior art fails to teach or fairly suggest: A system for the plasma treatment of a plurality of parts at one time, comprising: a reaction chamber having an open bottom; a chamber base sealingly engageable with said bottom of said reaction chamber to form a treatment chamber; a lifting device coupled with said reaction chamber and operable to lift said reaction chamber from said chamber base; a plasma-generating device

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operable to produce plasma within said treatment chamber for treating the plurality of parts, said plasma-generating device including a plurality of vertically spaced horizontal electrodes; a plurality of vertically spaced guides forming multiple levels along which the plurality of parts may be moved to a plurality of treatment positions within the treatment chamber, each of said plurality of guides associated with a respective one of said plurality of horizontal electrodes; and a transfer mechanism operable to transfer the plurality of parts along said plurality of guides to said plurality of treatment stations.

16. For claims 49-50, the prior art fails to teach or fairly suggest: A system for the plasma treatment of a part, comprising: a reaction chamber having an open bottom; a chamber base sealingly engageable with said bottom of said reaction chamber to form a treatment chamber; a lifting device coupled with said reaction chamber and operable to lift said reaction chamber from said chamber base; a guide along which the part may be moved; an input carrier adapted to hold the part adjacent to said guide prior to transfer into the treatment chamber; an output carrier adapted to receive the part from said guide following plasma treatment; a transfer mechanism operable to transfer the part along said guide when said reaction chamber is disengaged from said chamber base; and a plasma-generating device operable to produce plasma within said treatment chamber for the part.

17. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on 703.308.1633. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

km
22 December 2003

P. Hassanzadeh
Parviz Hassanzadeh
Primary Examiner
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